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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/697,101	10/31/2003	Ashok B. Nayak	036263-018	8993

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EXAMINER

CHEN, TIANJIE

ART UNIT

PAPER NUMBER

2652

DATE MAILED: 07/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/697,101

Applicant(s)

NAYAK ET AL.

Examiner

Tianjie Chen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 11 and 12 is/are rejected.
- 7) ☒ Claim(s) 4-10 and 13-20 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>20031031</u> . | 6) <input type="checkbox"/> Other: ____ |

Non-Final Rejection

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-3, 11, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Todd et al (US 6,057,980) in view of Dohman (US 5,867,352).

Claim 1, Todd et al shows a cleaning apparatus for a magnetic write/read head of a tape drive including: a cleaning brush (Fig. 4, column 4, lines 26-31); and means 72 for guiding the cleaning brush in the vertical direction of the head.

Todd does not show grooves in the write/read head.

Dohman shows a cleaning apparatus for a magnetic write/read head, wherein the head has cleaning grooves 61 and 62 (Fig. 5; column 5, lines 22-25).

It would have been obvious at the time the invention was made to one of ordinary skill in the art to add the cleaning grooves taught by Dohman onto magnetic head in Todd et al's device. The rationale is as follows: Dohman teaches that by adding the grooves the dirt, which is scraped off, is collected in the grooves. One of ordinary skill in the art would have been motivated to add the grooves for collecting the dirt and then clean it by the brush. In such constructed device, means 72 would guide the cleaning brush in the same direction as grooves in the write/read head.

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Claim 2, the above constructed device is a tape drive head cleaner for a tape drive having a magnetic read/write head, the head cleaner including: a brush carriage 74; a brush 70 mounted on the brush carriage; and a brush carriage movement mechanism 74+76 coupled to the brush carriage for moving the brush carriage to cause the brush to sweep along the length of the read/write head (Fig. 4, column 4, lines 25-34).

Claim 3, in the above constructed device, the read/write head has longitudinal grooves, and the brush inherits bristles, and wherein the brush carriage movement mechanism is configured to move the brush carriage so as to cause the brush bristles to enter the grooves and move the brush in the direction of the grooves.

Claim 11, as described above, the above constructed device is a tape drive including: a write/read head having grooves extending along a first axis; a brush; and a brush carriage on which the brush is mounted, the brush carriage controllably movable to sweep the brush on the write/read head along the first axis.

Claim 12, Todd et al further shows a write/read head actuator configured to move the write/read head on the first axis (Column 6, lines 15-19).

Allowable Subject Matter

2. Claims 4-10 and 13-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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- With regard to claims 4 and 13, Todd et al further shows an actuator coupled to the read/write head, the actuator controllable to move the read/write head; **but fails to show** that the actuator controllable to move the read/write head **during movement of the brush carriage**.
- Applicant states in specification p. 6: in certain embodiments of the invention, the write/read head actuator is activated to move the write/read head up and down along the first axis 13 at the same time the brush is moved up and down to sweep the length of the grooves in the write/read head. The movement of the write/read head created by the write/read head actuator serves to agitate and loosen the debris, which the brush sweeps out of the grooves in the write/read head.

Conclusion

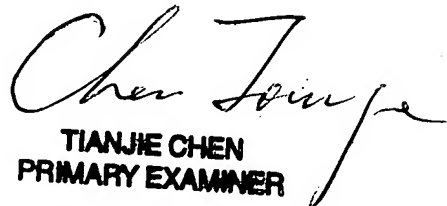
3. The prior art made of record in PTO-892 Form and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tianjie Chen whose telephone number is 571-272-7570. The examiner can normally be reached on 8:00-4:30, Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa Nguyen can be reached on 571-272-7579. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


TIANJIE CHEN
PRIMARY EXAMINER